

FIG. 1
BACKGROUND ART

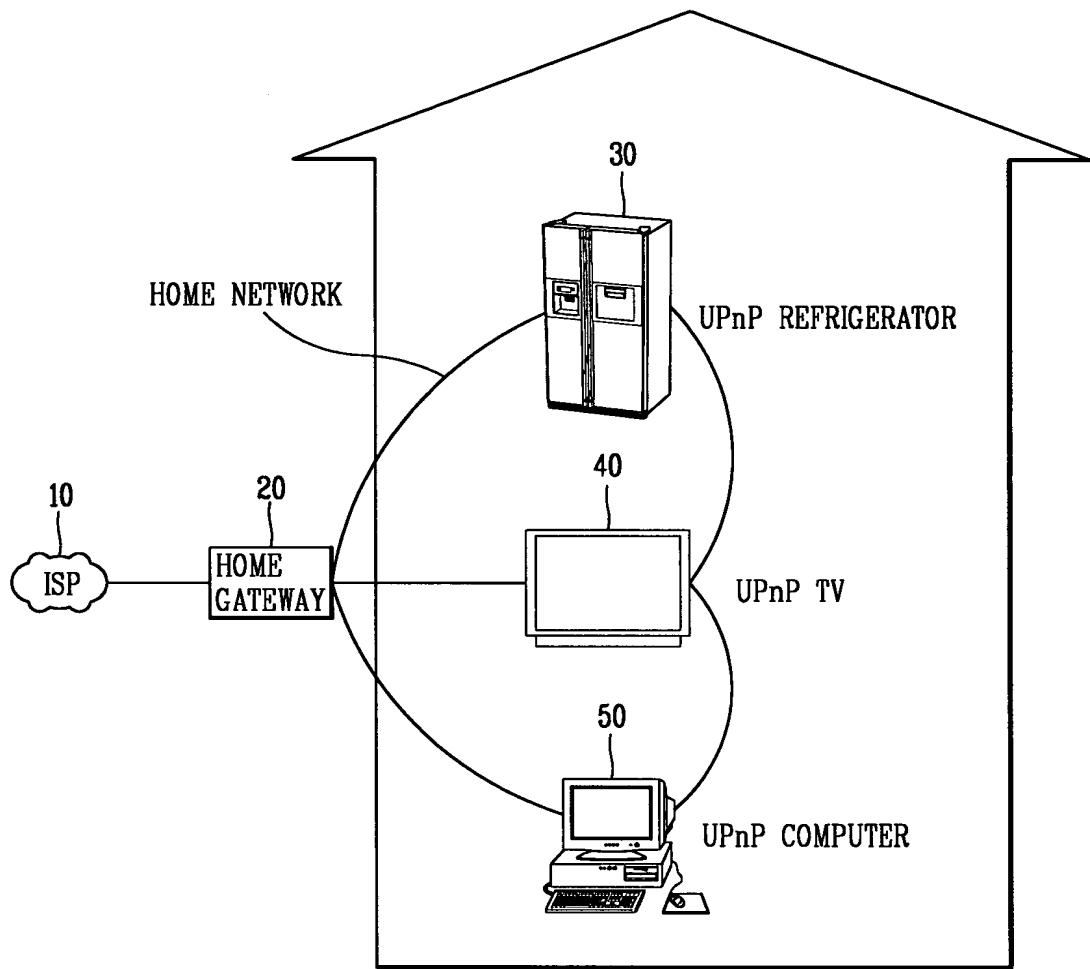


FIG. 2
BACKGROUND ART

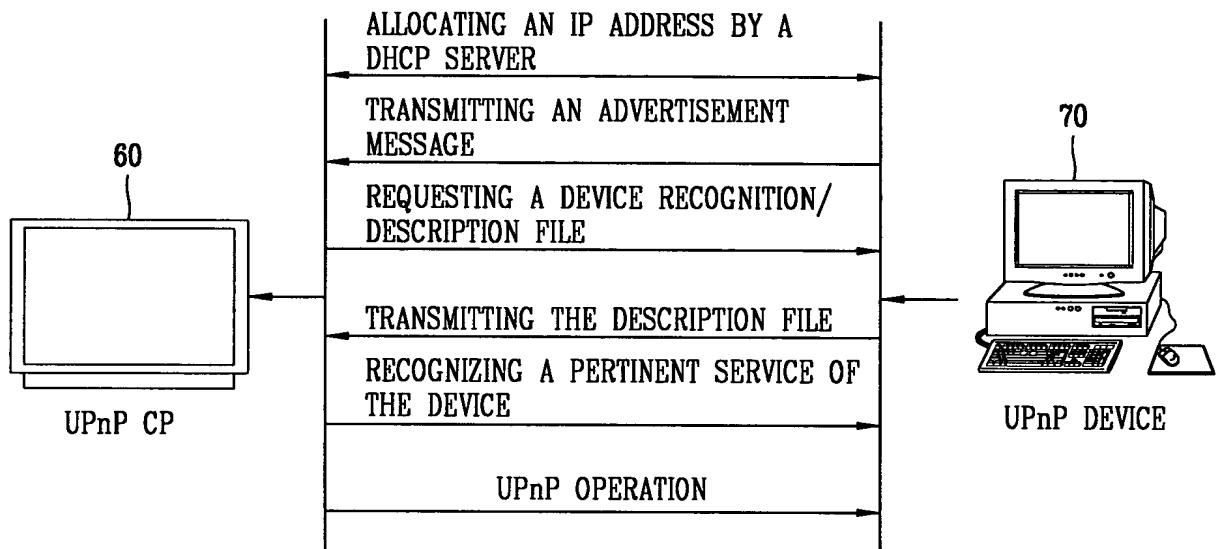


FIG. 3
BACKGROUND ART

```
M-SEARCH * HTTP/1.1
HOST: 239.255.255.250:1900
MAN: "ssdp:discover"
MX: seconds to delay response
ST: search target
```

FIG. 4
BACKGROUND ART

```
NOTIFY * HTTP/1.1
HOST: 239.255.255.250:1900
CACHE-CONTROL: max-age=seconds until advertisement expires
LOCATION: URL for UPnP description for root device
NT: search target
NTS: ssdp:alive
SERVER: OS/version UPnP/1.0 product/version
USN: advertisement UUID
```

FIG. 5

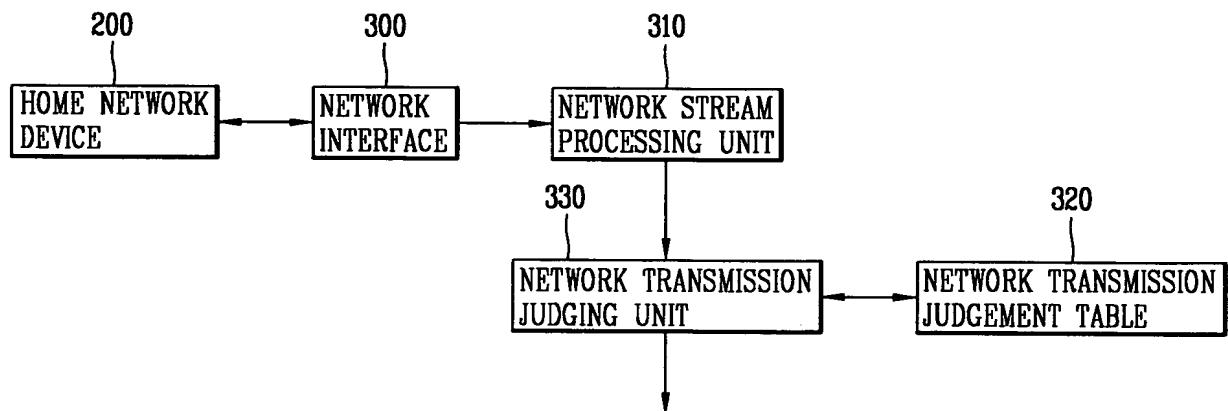


FIG. 6

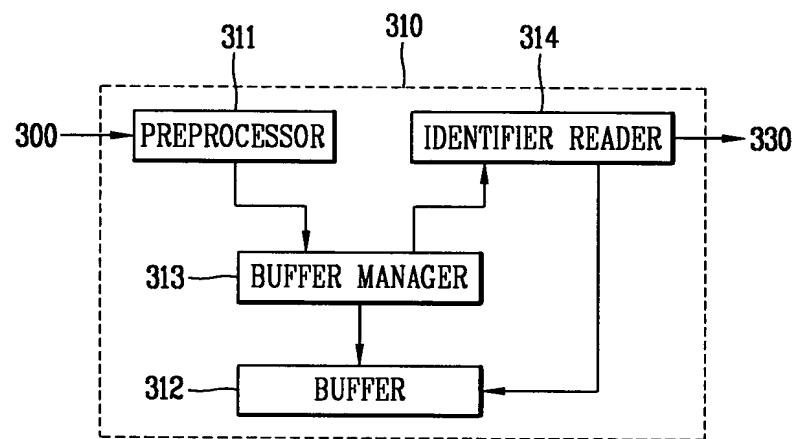


FIG. 7

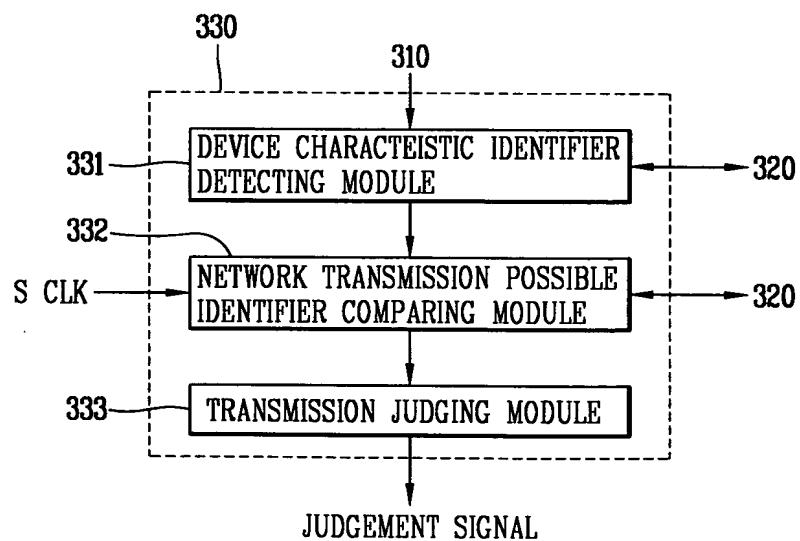


FIG. 8

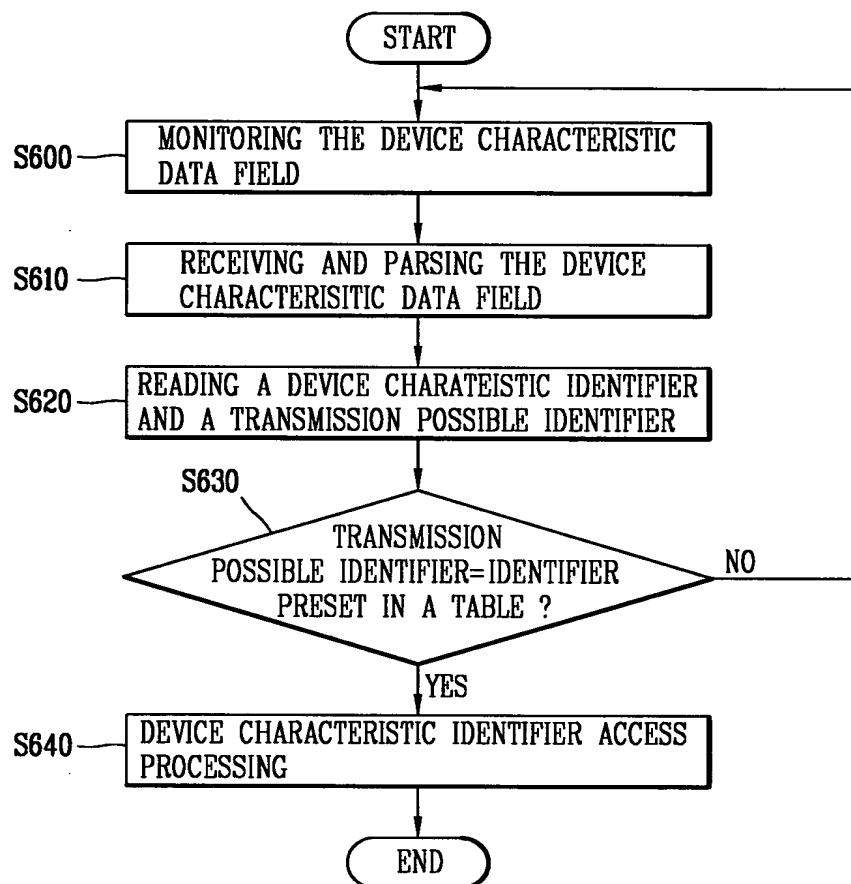


FIG. 9

```
M-SEARCH * HTTP/1.1
HOST: 239.255.255.250:1900
MAN: "ssdp:discover"
MX: seconds to delay response
ST: search target
PW: authorized key
```

FIG. 10

ST(DEVICE CHARACTERISTIC IDENTIFIER)	PW(NETWORK TRANSMISSION POSSIBLE IDENTIFIER)	RECOGNITION ITEM
SSDP : ALL	ALL : XXXXXX	ALL DEVICES IN NETWORK
UPnP : ROOTDEVICE	UPnP : ZZZZZZ	RECOGNIZING ONLY A ROOT DEVICE
UUID : DEVICE-UUID	UUID : SSSSSSS	RECOGNIZING ONLY A SPECIFIC DEVICE
Urn : SCHEMAS-UPnP-ORG : DEVICE : DEVICE TYPE	Urn : DEVICE TYPE : TTTTTTT	RECOGNIZING ONLY A SPECIFIC DEVICE
Urn : SCHEMAS-UPnP-ORG : SERVICE : SERVICE TYPE	Urn : SERVICE TYPE : FFFFFFF	RECOGNIZING ONLY A SPECIFIC SERVICE TYPE

FIG. 11

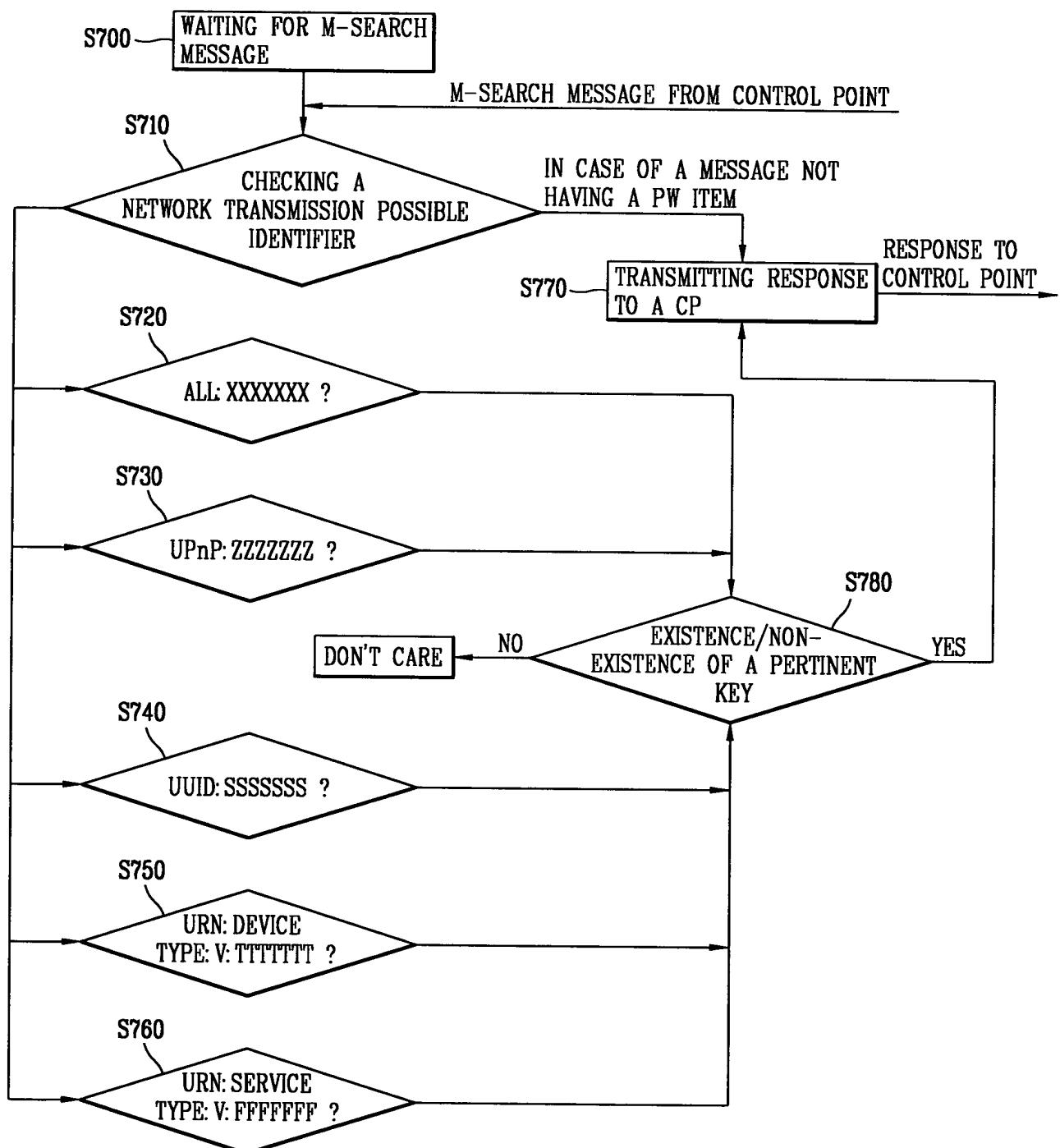


FIG. 12

```
NOTIFY * HTTP/1.1
HOST : 239.255.255.250:1900
CACHE-CONTROL: max-age=seconds until advertisement expires
LOCATION: URL for UPnP description for root device
NT: search target
PW: authoORIZED key
NTS: ssdp:alive
SERVER: OS/version UPnP/1.0 product/version
USN: advertisement UUID
```

FIG. 13

NT(DEVICE CHARACTERISTIC IDENTIFIER)	PW(NETWORK TRANSMISSION POSSIBLE IDENTIFIER)	DEVICE RECOGNITION ITEM
UPnP: ROOT DEVICE	UPnP: ZZZZZZZ	ADVERTISING ONLY A ROOT DEVICE
UUID: DEVICE-UUID	UUID: SSSSSSS	ADVERTISING ONLY A SPECIFIC DEVICE
URN: SCHEMAS- UPnP-ORG: DEVICE: DEVICE TYPE: V	URN: DEVICE TYPE: V: TTTTTTT	ADVERTISING ONLY A SPECIFIC DEVICE TYPE
URN: SCHEMAS- UPnP-ORG: SERVICE: SERVICE TYPE: V	URN: SERVICE TYPE: V: FFFFFFFF	ADVERTISING ONLY A SPECIFIC SERVICE TYPE

FIG. 14

